

Amendments to the Specification:

Please replace paragraphs [0027] and [0028] with the following amended paragraphs:

[0027] For yet another embodiment of the invention, the micro-channels may comprise vertical sintered copper powder walls to further improve heat transfer. Figure 8 depicts a micro-channel 800 having a sintered copper powder wall ~~740~~ 840. The sintered copper powder wall 840 ~~740~~ is coupled to a fluid passageway ~~760~~ 860. The micro-channel is coupled to a component ~~710~~ 810.

[0028] The sintered copper powder wall 840 ~~740~~ provides nucleation sites for vapor bubbles created by heat transferred from the component ~~710~~ 810. By introducing sintered copper powder walls throughout the evaporator, the nucleation sites provide equal pressurization across the evaporator and improved nucleation site density. As a result, boiling heat transfer is increased.